Pham 2360

4 6 8 9 10 12 13 17 24
1: LonelyBoi_39
3 8 9 13 17 18 19 20 22 23
2: Zirinka_37 + 4
12 3 5 8 11 13 14 15 16 18 21 22 23
3: AlumEl_40 + 1
3 5 7 8 9 13 18 19 20 22 23
4: Maridalia_40
3 5 7 8 10 13 14 15 17 18 19 21 23
5: Hyzer_44
3 8 9 13 17 18 19 20 22 23
6: Savage_38 + 27

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 2360 Report

This analysis was run 04/28/24 on database version 559.

Pham number 2360 has 38 members, 2 are drafts.

Phages represented in each track:
• Track 1 : LonelyBoi_39
• Track 2 : Zirinka_37, EdnaMode_34, Bialota_38, Cynthia_38, Gizermo_38
• Track 3 : AlumE_40, BoyNamedSue_40
• Track 4 : Maridalia_40
• Track 5 : Hyzer_44
• Track 6 : Savage_38, Whiteclaw_38, Mocha12_38, Lamberg_34, Manasvini_40, Pickett_33, Suscepit_40, Haley23_38, SoilAssassin_35, Ebert_40, Tayonia_40, TuertoX_38, Clap_38, Polly_37, Nettuno_34, Matteo_31, Neobush_40, Antonio_40, Sproutie_38, Zameen_40, Sahara_37, Yeet412_35, Eudoria_40, GemG_38, Bjanes7_35, Trumpet_40, Kita_41, Attis_35

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 3, it was called in 31 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AlumE_40, Antonio_40, Attis_35, Bjanes7_35, BoyNamedSue_40, Clap_38, Ebert_40, Eudoria_40, GemG_38, Haley23_38, Kita_41, Lamberg_34, Manasvini_40, Maridalia_40, Matteo_31, Mocha12_38, Neobush_40, Nettuno_34, Pickett_33, Polly_37, Sahara_37, Savage_38, SoilAssassin_35, Sproutie_38, Suscepit_40, Tayonia_40, Trumpet_40, TuertoX_38, Whiteclaw_38, Yeet412_35, Zameen_40,

Genes that have the "Most Annotated" start but do not call it:
• Bialota_38, Cynthia_38, EdnaMode_34, Gizermo_38, Hyzer_44, Zirinka_37,

Genes that do not have the "Most Annotated" start:
• LonelyBoi_39,

Summary by start number:

Start 3:
• Found in 37 of 38 (97.4%) of genes in pham
• Manual Annotations of this start: 31 of 36

• Called 83.8% of time when present
• Phage (with cluster) where this start called: AlumE_40 (CZ1), Antonio_40 (CZ1), Attis_35 (CZ2), Bjanes7_35 (CZ2), BoyNamedSue_40 (CZ1), Clap_38 (CZ2), Ebert_40 (CZ2), Eudoria_40 (CZ1), GemG_38 (CZ2), Haley23_38 (CZ2), Kita_41 (CZ1), Lamberg_34 (CZ2), Manasvini_40 (CZ1), Maridalia_40 (CZ1), Matteo_31 (CZ2), Mocha12_38 (CZ2), Neobush_40 (CZ1), Nettuno_34 (CZ2), Pickett_33 (CZ2), Polly_37 (CZ1), Sahara_37 (CZ2), Savage_38 (CZ2), SoilAssassin_35 (CZ2), Sproutie_38 (CZ2), Suscepit_40 (CZ1), Tayonia_40 (CZ1), Trumpet_40 (CZ1), TuertoX_38 (CZ2), Whiteclaw_38 (CZ2), Yeet412_35 (CZ2), Zameen_40 (CZ1),

Start 7:
• Found in 2 of 38 (5.3%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Hyzer_44 (CZ1),

Start 8:
• Found in 38 of 38 (100.0%) of genes in pham
• Manual Annotations of this start: 5 of 36
• Called 15.8% of time when present
• Phage (with cluster) where this start called: Bialota_38 (CZ1), Cynthia_38 (CZ2), EdnaMode_34 (CZ2), Gizermo_38 (CZ2), LonelyBoi_39 (CY), Zirinka_37 (CZ1),

Summary by clusters:

There are 3 clusters represented in this pham: CZ2, CY, CZ1,

Info for manual annotations of cluster CY:
•Start number 8 was manually annotated 1 time for cluster CY.

Info for manual annotations of cluster CZ1:
•Start number 3 was manually annotated 13 times for cluster CZ1.
•Start number 8 was manually annotated 2 times for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 3 was manually annotated 18 times for cluster CZ2.
•Start number 8 was manually annotated 2 times for cluster CZ2.

Gene Information:

Gene: AlumE_40 Start: 32760, Stop: 32386, Start Num: 3
Candidate Starts for AlumE_40:
(1, 32871), (2, 32868), (Start: 3 @32760 has 31 MA's), (5, 32736), (Start: 8 @32700 has 5 MA's), (11, 32577), (13, 32535), (14, 32520), (15, 32517), (16, 32508), (18, 32502), (21, 32463), (22, 32430), (23, 32406),

Gene: Antonio_40 Start: 32034, Stop: 31660, Start Num: 3
Candidate Starts for Antonio_40:
(Start: 3 @32034 has 31 MA's), (Start: 8 @31974 has 5 MA's), (9, 31935), (13, 31809), (17, 31779), (18, 31776), (19, 31773), (20, 31755), (22, 31704), (23, 31680),

Gene: Attis_35 Start: 29167, Stop: 28793, Start Num: 3
Candidate Starts for Attis_35:
(Start: 3 @29167 has 31 MA's), (Start: 8 @29107 has 5 MA's), (9, 29068), (13, 28942), (17, 28912), (18, 28909), (19, 28906), (20, 28888), (22, 28837), (23, 28813),

Gene: Bialota_38 Start: 32726, Stop: 32412, Start Num: 8
Candidate Starts for Bialota_38:
(Start: 3 @32786 has 31 MA's), (Start: 8 @32726 has 5 MA's), (9, 32687), (13, 32561), (17, 32531), (18, 32528), (19, 32525), (20, 32507), (22, 32456), (23, 32432),

Gene: Bjanes7_35 Start: 29166, Stop: 28792, Start Num: 3
Candidate Starts for Bjanes7_35:
(Start: 3 @29166 has 31 MA's), (Start: 8 @29106 has 5 MA's), (9, 29067), (13, 28941), (17, 28911), (18, 28908), (19, 28905), (20, 28887), (22, 28836), (23, 28812),

Gene: BoyNamedSue_40 Start: 32760, Stop: 32386, Start Num: 3
Candidate Starts for BoyNamedSue_40:
(1, 32871), (2, 32868), (Start: 3 @32760 has 31 MA's), (5, 32736), (Start: 8 @32700 has 5 MA's), (11, 32577), (13, 32535), (14, 32520), (15, 32517), (16, 32508), (18, 32502), (21, 32463), (22, 32430), (23, 32406),

Gene: Clap_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for Clap_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Cynthia_38 Start: 29285, Stop: 28971, Start Num: 8
Candidate Starts for Cynthia_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Ebert_40 Start: 29269, Stop: 28895, Start Num: 3
Candidate Starts for Ebert_40:
(Start: 3 @29269 has 31 MA's), (Start: 8 @29209 has 5 MA's), (9, 29170), (13, 29044), (17, 29014), (18, 29011), (19, 29008), (20, 28990), (22, 28939), (23, 28915),

Gene: EdnaMode_34 Start: 27795, Stop: 27481, Start Num: 8
Candidate Starts for EdnaMode_34:
(Start: 3 @27855 has 31 MA's), (Start: 8 @27795 has 5 MA's), (9, 27756), (13, 27630), (17, 27600), (18, 27597), (19, 27594), (20, 27576), (22, 27525), (23, 27501),

Gene: Eudoria_40 Start: 32034, Stop: 31660, Start Num: 3
Candidate Starts for Eudoria_40:
(Start: 3 @32034 has 31 MA's), (Start: 8 @31974 has 5 MA's), (9, 31935), (13, 31809), (17, 31779), (18, 31776), (19, 31773), (20, 31755), (22, 31704), (23, 31680),

Gene: GemG_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for GemG_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Gizermo_38 Start: 29285, Stop: 28971, Start Num: 8
Candidate Starts for Gizermo_38:

(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Haley23_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for Haley23_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Hyzer_44 Start: 34840, Stop: 34520, Start Num: 7
Candidate Starts for Hyzer_44:
(Start: 3 @34894 has 31 MA's), (5, 34870), (7, 34840), (Start: 8 @34834 has 5 MA's), (10, 34723), (13, 34669), (14, 34654), (15, 34651), (17, 34639), (18, 34636), (19, 34633), (21, 34597), (23, 34540),

Gene: Kita_41 Start: 32043, Stop: 31669, Start Num: 3
Candidate Starts for Kita_41:
(Start: 3 @32043 has 31 MA's), (Start: 8 @31983 has 5 MA's), (9, 31944), (13, 31818), (17, 31788), (18, 31785), (19, 31782), (20, 31764), (22, 31713), (23, 31689),

Gene: Lamberg_34 Start: 27854, Stop: 27480, Start Num: 3
Candidate Starts for Lamberg_34:
(Start: 3 @27854 has 31 MA's), (Start: 8 @27794 has 5 MA's), (9, 27755), (13, 27629), (17, 27599), (18, 27596), (19, 27593), (20, 27575), (22, 27524), (23, 27500),

Gene: LonelyBoi_39 Start: 33917, Stop: 33603, Start Num: 8
Candidate Starts for LonelyBoi_39:
(4, 33968), (6, 33944), (Start: 8 @33917 has 5 MA's), (9, 33878), (10, 33806), (12, 33767), (13, 33752), (17, 33722), (24, 33608),

Gene: Manasvini_40 Start: 32035, Stop: 31661, Start Num: 3
Candidate Starts for Manasvini_40:
(Start: 3 @32035 has 31 MA's), (Start: 8 @31975 has 5 MA's), (9, 31936), (13, 31810), (17, 31780), (18, 31777), (19, 31774), (20, 31756), (22, 31705), (23, 31681),

Gene: Maridalia_40 Start: 32033, Stop: 31659, Start Num: 3
Candidate Starts for Maridalia_40:
(Start: 3 @32033 has 31 MA's), (5, 32009), (7, 31979), (Start: 8 @31973 has 5 MA's), (9, 31934), (13, 31808), (18, 31775), (19, 31772), (20, 31754), (22, 31703), (23, 31679),

Gene: Matteo_31 Start: 26896, Stop: 26522, Start Num: 3
Candidate Starts for Matteo_31:
(Start: 3 @26896 has 31 MA's), (Start: 8 @26836 has 5 MA's), (9, 26797), (13, 26671), (17, 26641), (18, 26638), (19, 26635), (20, 26617), (22, 26566), (23, 26542),

Gene: Mocha12_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for Mocha12_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Neobush_40 Start: 32028, Stop: 31654, Start Num: 3
Candidate Starts for Neobush_40:
(Start: 3 @32028 has 31 MA's), (Start: 8 @31968 has 5 MA's), (9, 31929), (13, 31803), (17, 31773), (18, 31770), (19, 31767), (20, 31749), (22, 31698), (23, 31674),

Gene: Nettuno_34 Start: 27854, Stop: 27480, Start Num: 3
Candidate Starts for Nettuno_34:
(Start: 3 @27854 has 31 MA's), (Start: 8 @27794 has 5 MA's), (9, 27755), (13, 27629), (17, 27599), (18, 27596), (19, 27593), (20, 27575), (22, 27524), (23, 27500),

Gene: Pickett_33 Start: 26331, Stop: 25957, Start Num: 3
Candidate Starts for Pickett_33:
(Start: 3 @26331 has 31 MA's), (Start: 8 @26271 has 5 MA's), (9, 26232), (13, 26106), (17, 26076), (18, 26073), (19, 26070), (20, 26052), (22, 26001), (23, 25977),

Gene: Polly_37 Start: 31477, Stop: 31103, Start Num: 3
Candidate Starts for Polly_37:
(Start: 3 @31477 has 31 MA's), (Start: 8 @31417 has 5 MA's), (9, 31378), (13, 31252), (17, 31222), (18, 31219), (19, 31216), (20, 31198), (22, 31147), (23, 31123),

Gene: Sahara_37 Start: 29092, Stop: 28718, Start Num: 3
Candidate Starts for Sahara_37:
(Start: 3 @29092 has 31 MA's), (Start: 8 @29032 has 5 MA's), (9, 28993), (13, 28867), (17, 28837), (18, 28834), (19, 28831), (20, 28813), (22, 28762), (23, 28738),

Gene: Savage_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for Savage_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: SoilAssassin_35 Start: 29166, Stop: 28792, Start Num: 3
Candidate Starts for SoilAssassin_35:
(Start: 3 @29166 has 31 MA's), (Start: 8 @29106 has 5 MA's), (9, 29067), (13, 28941), (17, 28911), (18, 28908), (19, 28905), (20, 28887), (22, 28836), (23, 28812),

Gene: Sproutie_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for Sproutie_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Suscepit_40 Start: 32035, Stop: 31661, Start Num: 3
Candidate Starts for Suscepit_40:
(Start: 3 @32035 has 31 MA's), (Start: 8 @31975 has 5 MA's), (9, 31936), (13, 31810), (17, 31780), (18, 31777), (19, 31774), (20, 31756), (22, 31705), (23, 31681),

Gene: Tayonia_40 Start: 32034, Stop: 31660, Start Num: 3
Candidate Starts for Tayonia_40:
(Start: 3 @32034 has 31 MA's), (Start: 8 @31974 has 5 MA's), (9, 31935), (13, 31809), (17, 31779), (18, 31776), (19, 31773), (20, 31755), (22, 31704), (23, 31680),

Gene: Trumpet_40 Start: 32035, Stop: 31661, Start Num: 3
Candidate Starts for Trumpet_40:
(Start: 3 @32035 has 31 MA's), (Start: 8 @31975 has 5 MA's), (9, 31936), (13, 31810), (17, 31780), (18, 31777), (19, 31774), (20, 31756), (22, 31705), (23, 31681),

Gene: TuertoX_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for TuertoX_38:

(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Whiteclaw_38 Start: 29345, Stop: 28971, Start Num: 3
Candidate Starts for Whiteclaw_38:
(Start: 3 @29345 has 31 MA's), (Start: 8 @29285 has 5 MA's), (9, 29246), (13, 29120), (17, 29090), (18, 29087), (19, 29084), (20, 29066), (22, 29015), (23, 28991),

Gene: Yeet412_35 Start: 29167, Stop: 28793, Start Num: 3
Candidate Starts for Yeet412_35:
(Start: 3 @29167 has 31 MA's), (Start: 8 @29107 has 5 MA's), (9, 29068), (13, 28942), (17, 28912), (18, 28909), (19, 28906), (20, 28888), (22, 28837), (23, 28813),

Gene: Zameen_40 Start: 32034, Stop: 31660, Start Num: 3
Candidate Starts for Zameen_40:
(Start: 3 @32034 has 31 MA's), (Start: 8 @31974 has 5 MA's), (9, 31935), (13, 31809), (17, 31779), (18, 31776), (19, 31773), (20, 31755), (22, 31704), (23, 31680),

Gene: Zirinka_37 Start: 32714, Stop: 32400, Start Num: 8
Candidate Starts for Zirinka_37:
(Start: 3 @32774 has 31 MA's), (Start: 8 @32714 has 5 MA's), (9, 32675), (13, 32549), (17, 32519), (18, 32516), (19, 32513), (20, 32495), (22, 32444), (23, 32420),